

Light Duty Vehicle Greenhouse Gas Emissions Standards (Pavley, 2002)

Background

In September of 2004, California Air Resources Board (ARB) approved standards implementing AB 1493, Assemblymember Fran Pavley's 2002 bill to reduce greenhouse gas (GHG) emissions coming from passenger vehicles at a "maximum feasible and cost effective reduction". These reductions are the first GHG standards in the nation for passenger vehicles. After being set, over 14 other states followed suit and adopted California standards. Pavley I took effect for model years starting in 2009 to 2016 and Pavley II, which is now referred to as "LEV (Low Emission Vehicle) III GHG" will cover 2017 to 2025. Fleet average emission standards would reach 22 per cent reduction by 2012 and 30 per cent by 2016.



Passenger Vehicles, Climate Change and Air Quality

Light duty vehicles are some of the biggest contributors to greenhouse gas transportation emissions, up to 80 per cent according to CARB in 2006. GHGs coming from our cars, trucks and SUVs have been a contributor to harmful climate change occurring on our planet today. Scientists have reported a gradual warming of our planet that can have disastrous consequences for our weather, air pollution, droughts, crops and public health.

Some of the GHGs spewing from our cars and trucks that contribute to climate change include:

- Methane (CH₄) and nitrous oxide (N₂O) are emitted whenever we turn on and operate our cars.
- Hydro fluorocarbons (HFCs) are refrigerants and emit from air conditioning systems that are old and in need of repair.

According to CARB, with the implementation of these standards, Californians could start seeing reductions of 87,700 CO₂ equivalent tons per day by 2020 and 155,200 by 2030. To provide a comparison, just one CO₂ equivalent ton equates to 216,000 passenger vehicles not being driven for one year. The standards strive to reach 80% reductions by 2050.

Economic Benefits

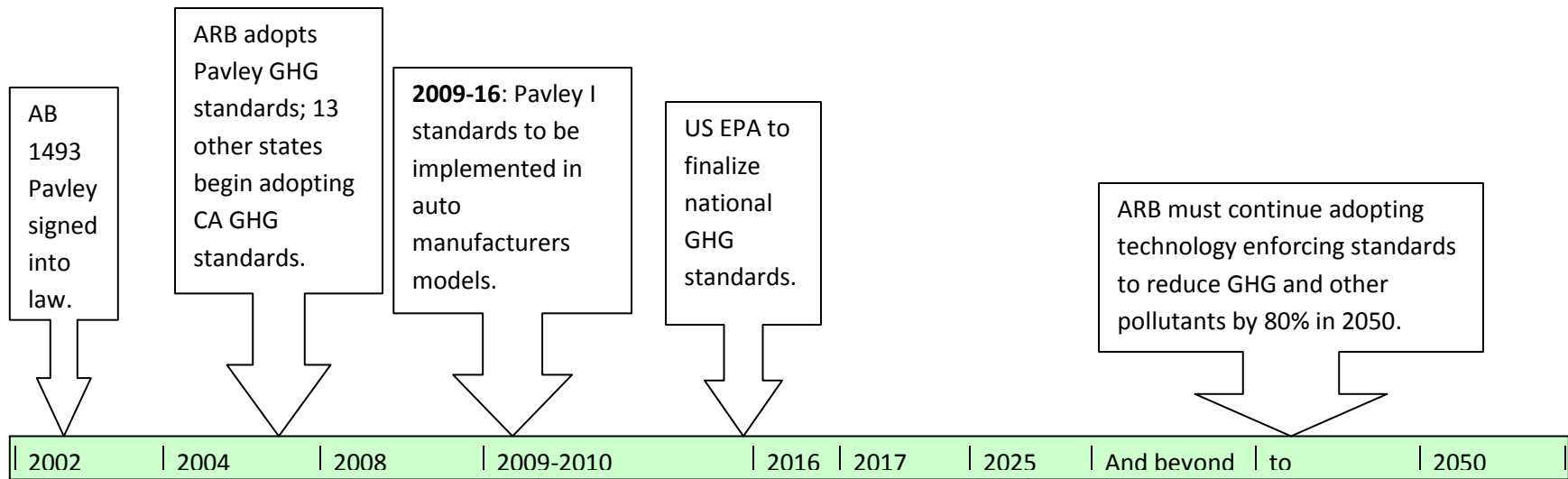
ARB staff has done an economic analysis of the GHG standards that show benefits to job creation and personal income. By 2030 77,000 new jobs could be created as a result of these technology forcing standards. And personal income for Californians could grow as much as \$7.3 billion by 2030.

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Timing and Benchmarks

Pavley I standards for model years 2009-16, will be reviewed by the Board this year in order to comply with the first ever federal standards for GHGs established by the U.S. Environmental Protection Agency (EPA) and the National Highway Traffic and Safety Administration (NHTSA). LEV III GHG (Pavley II) ARB will have a draft of proposed new standards for model years 2017-25 in April, with the intent to adopt in late summer/early fall.

Light Duty Vehicle Greenhouse Gas (Pavley) Standards Timeline



AB 1493 Pavley signed into law.

ARB adopts Pavley GHG standards; 13 other states begin adopting CA GHG standards.

2009-16: Pavley I standards to be implemented in auto manufacturers models.

US EPA to finalize national GHG standards.

ARB must continue adopting technology enforcing standards to reduce GHG and other pollutants by 80% in 2050.

Obama makes historic announcement to set federal greenhouse gas standards for the first time ever. US EPA waiver granted for California GHG standards.

2017-25: LEV III GHG (Pavley II) to be implemented.

Abbreviations

- ARB: The Air Resources Board
- AB: Assembly Bill
- GHG: Greenhouse gasses
- US EPA: Untied States Environmental Protection Agency
- LEV: Low Emission Vehicle Program